

## Protecting Malone Spring

Malone Spring is not your normal run-of-the-mill spring. It produces 3,000 gallons of water per minute or 4,320,000 gallons per day. Malone Spring produces so much water that in the 1960's, the City of Niota pumped water from the spring to provide water for its residents.

Robert Thompson has a two hundred head cow/calf operation in the Oostanaula Creek Watershed, and most days, the cow herd had to come to Malone Spring for water. Stream bank erosion was occurring as the cattle entered and left the watering area and water quality was impaired from livestock having direct access to the spring.

Thompson decided to address these problems by fencing the cattle from the spring and providing an alternative water supply for the herd. With cost-share assistance provided by the Oostanaula Creek Unified Watershed Project and the Southeast Tennessee Resource Conservation and Development Council, he constructed 4,685 feet of fence around Malone Spring and along both sides of Oostanaula Creek to prevent livestock from having direct access to the creek.



To provide an alternate water supply for the herd, he installed 6,000 feet of pipeline and six livestock watering tanks to provide water to each pasture field. A pump was installed in the spring to deliver water to the watering tanks. Heavy use area protection pads were constructed at each watering tank to prevent erosion around the tank.

Robert Thompson also constructed a stream crossing to allow livestock and equipment to cross the creek. Both sides of the creek are shaped and lined with rock to prevent erosion when used. Future plans include building an additional 3,800 feet of fence along Oostanaula Creek and installing an additional watering tank.

Thompson's conservation efforts have reduced soil erosion and improved the water quality of Malone Spring.